Amendment to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An actuator, comprising:

a housing accommodating a screw mechanism; and

a drive comprising a motor, wherein said screw mechanism comprises a nut and a screw, of which the screw is rotatably supported relative to the housing, such that upon relative rotation of the nut and the ~~screw~~ screw, a linear movement of said screw is obtained,

wherein at least a rotatable component of the ~~drive,~~ drive is rotatably supported ~~on~~ with respect to the screw which is rotatably supported relative to the housing, and the rotatable component of the drive is a rotor of the motor.

2. (Previously Presented) The actuator according to claim 1, wherein the screw is rotatably supported with respect to the housing by a support bearing.

3. (Previously Presented) The actuator according to claim 2, wherein the rotor of the motor is rotatably supported on the screw by an auxiliary bearing.

4. (Previously Presented) The actuator according to claim 3, wherein the support bearing is accommodated within the auxiliary bearing.

5. (Previously Presented) The actuator according to claim 2, wherein the screw is integrated with an outer ring of the support bearing.

6. (Previously Presented) The actuator according to claim 5, wherein an outer diameter of the outer ring of the support bearing is larger than an outer diameter of the screw.

7. (Previously Presented) The actuator according to claim 2, wherein an outer ring of the bearing supports a rotatable sleeve which is in connection with the rotatable component of the drive.

8. (Previously Presented) The actuator according to claim 7, wherein the sleeve is rotatably connected to, the outer ring of an auxiliary bearing, and which in turn is rotatably connected to an inner ring of the outer ring of the support bearing.

9. (Previously Presented) The actuator according to claim 8, wherein an inner surface of the sleeve comprises two axially spaced raceways, each of said raceways engaging a number of rolling elements which each engage a raceway on an outer surface of the outer ring of the support bearing.

10. (Previously Presented) The actuator according to claim 7, wherein the sleeve is connected to the rotor of the motor.

11. (Currently Amended) The actuator according to claim 1, wherein ~~one of the nut and~~ the screw is rotatably supported according to an axis parallel with respect to said linear movement, and according to at least one axis transverse with respect to said linear movement.

12. (Currently Amended) The actuator according to claim 11, ~~wherein one of the nut and~~ the screw is supported with respect to the housing by a ball joint.

13. (Previously Presented) The actuator according to claim 12, wherein the ball joint is at one end of a central support shaft, and the other end of the central support shaft is connected to the housing.

14. (Previously Presented) The actuator according to claim 13, wherein the ball joint is connected to a support bearing, said support bearing supporting the screw,

wherein said one of the nut and the screw is drivably connected to the rotor of the motor.

15. (Currently Amended) The actuator according to claim 14, wherein ~~said one of the nut and~~ the screw engages the rotor through a coupling which allows rotation about at least one axis transverse relative to the linear movement.

16. (Previously Presented) The actuator according to claim 15, wherein a coupling comprises an internally toothed member and an externally toothed member having an equal number of teeth.

17. (Previously Presented) The actuator according to claim 16, wherein the teeth of the externally toothed member are convexly curved in a cross-section parallel to the linear movement.

18. (Previously Presented) The actuator according to claim 16, wherein the teeth of the externally toothed member are centered with respect to the ball joint.

19. (Previously Presented) The actuator according to claim 14, wherein the screw is integrated with an outer ring of the support bearing.

20. (Previously Presented) The actuator according to claim 19, wherein an outer diameter of the outer ring of the support bearing is larger than an outer diameter of the screw.

21. (Previously Presented) The actuator according to claim 19, wherein the outer ring of the support bearing is integrated with an internally toothed member.

22. (Previously Presented) The actuator according to claim 20, wherein the screw and an internally toothed member are at axially opposite ends of the outer ring of the support bearing.

23. (Previously Presented) The actuator according to claim 19, wherein the rotor of the motor is rotatably supported on the outer ring of the support bearing.

24. (Previously Presented) The actuator according to claim 23, wherein the rotor engages an externally toothed member through a reduction gear mechanism.

25. (Previously Presented) The actuator according to claim 24, wherein the support bearing is supported on one end of a support shaft, the other end of the support shaft is connected to the housing, the externally toothed member being rotatably supported on said support shaft.

26. (Previously Presented) The actuator according to claim 19, wherein the rotor of the motor directly engages the outer ring of the support bearing.

27. (Previously Presented) The actuator according to claim 26, wherein the rotor is integrated with an internally toothed member, and the outer ring of the support bearing is integrated with an externally toothed member, said members engaging each other.

28. (Previously Presented) The actuator according to claim 13, wherein the screw and the support shaft each have a through going bore respectively, said bores being aligned with each other.

29. (Previously Presented) The actuator according to claim 1, wherein the screw includes a bore containing a grease dosing unit.

30. (Previously Presented) The actuator according to claim 1, wherein at least one of the screw mechanism, a support bearing, an auxiliary bearing and a reduction gear mechanism comprises a surface obtained by hard turning.

31. (Previously Presented) The actuator according to claim 1, wherein at least one of the screw mechanism, a support bearing, an auxiliary bearing and a reduction gear mechanism comprises a diamond-like carbon coating.

32. (Previously Presented) The actuator according to claim 1, wherein an encoder is provided for measuring a relative rotation.

33. (Currently Amended) A brake calliper for a disc brake, comprising:

a claw piece carrying at least two opposite brake pads which enclose a gap for accommodating the disk brake; and

an actuator according to claim 1,

wherein said actuator comprises: a housing accommodating a screw mechanism; and a drive comprising a motor, wherein said screw mechanism comprises a nut and a screw, ~~one~~ of which the screw is rotatably supported relative to the housing, such that

upon relative rotation of the nut and the ~~screw~~ screw, a linear movement of ~~one of said nut and~~ said screw is obtained, said housing being connected to the claw piece, wherein at least a rotatable component of the drive is rotatably supported ~~on~~ with respect to ~~the nut or~~ the screw which is rotatably supported relative to the housing, and wherein the rotatable component of the drive is the rotor of the motor.